

CLAIMS

What is claimed as new and desired to be protected by Letters Patent of the United States is:

1. In a switched arbitrated loop system with multiple trunks, configured for communication using the Fibre Channel protocol, a method to address lockup conditions, comprising:
 - a) with respect to a particular switch in the system, detecting a particular combination of a plurality of pending open conditions on the multiple trunks indicating a lockup condition; and
 - b) based on the detection, closing at least one of the plurality of pending open conditions, thereby alleviating the lockup condition.
2. The method of claim 1, wherein:
 - step a) further includes detecting, for particular ones of the multiple trunks on which there is a connection, a lack of data communication on those trunks.
3. The method of claim 2, wherein:
 - detecting a lack of data communication on a particular trunk includes detecting that a particular type of signal has not been detected on that particular trunk for a predetermined period of time.
4. The method of claim 3, wherein:
 - the particular type of signal includes RRDY and SOF.
5. The method of claim 2, wherein:
 - with respect to the particular switch, the trunks are configured into groups of multiple trunks; and

the particular condition includes, for each of the groups of multiple trunks, at least one of the trunks being characterized by a pending open condition and at least one other of the trunks being characterized by a lack of data communication thereon.

6. The method of claim 1, wherein:

the multiple trunks includes strings;

step a) further comprises

a1) detecting that, with respect to a particular switch, there is a pending open on at least one particular one of the strings and a connection on at least another of the strings;
and

a2) detecting at least one port not detected in a1) having a destination that is a connection on at least one string detected in a1), wherein the pending open on the port detected in a2) has a close counter at maximum value.